

App. No. 10/601,135  
Amct. dated February 22, 2005  
Reply to Office Action of October 21, 2004

**Amendments to the Abstract**

Please replace the Abstract subtitle and text with the following:

**Abstract of the Disclosure**

The treatment unit  $[(16)]$  comprises N adsorption units, N being greater than or equal to 1, operating on a parametrized cycle split uniformly into at most N phase times. Further more, use is made of a control unit  $[(30)]$  for controlling the treatment unit  $[(16)]$ , designed to modify at least one parameter of the cycle. Each time there is a predicted change in the composition of the feed gas, the control unit is sent a pre-established signal representing this change. The processing unit  $[(30)]$  then processes the said signal to determine the parameters of an exceptional operating cycle of the treatment unit  $[(16)]$  which cycle is suited to the said predicted change.

~~Application to the production of practically pure hydrogen.~~

~~Figure 4.~~